

**In the Specification:**

Please amend the specification as shown:

Please delete the paragraph on page 13, lines 4-19, and replace it with the following paragraph:

Two homopyrimidine light-up probes, H-CCTTTTCCCC-NH<sub>2</sub> (**SEQ ID NO: 5**) (IgL $\kappa$ LUP) and CCTCCTCTCT-NH<sub>2</sub> (**SEQ ID NO: 6**) (IgL $\lambda$ LUP), directed against PCR amplification products of the constant regions in the human immunoglobulin kappa (IgL $\kappa$ ) and lambda (IgL $\lambda$ ) light-chains respectively, were designed. Both probes are homopyrimidine sequences, which are known to exhibit very large signal enhancement upon target binding (Svanvik N, Nygren J, Westman G, Kubista M: Free-probe fluorescence of light-up probes. J Am Chem Soc 2001, 123:803-809). Both probes had the thiazole orange derivate, N-carboxypentyl-4- [(3'-methyl-1',3'-benzothiazol-2'-yl) methylenyl] quinolinium iodide (TO-N-5-COOH), as label. They were synthesized by solid phase synthesis and purified twice by reverse phase HPLC as described (Svanvik N, Westman G, Wang D, Kubista M: Light-up probes: thiazole orange-conjugated peptide nucleic acid for detection of target nucleic acid in homogeneous solution. Anal Biochem 2000, 281:26-35). Probe concentrations were determined spectroscopically assuming molar absorptivities at 260nm of 83,100 M<sup>-1</sup> cm<sup>-1</sup> for IgL $\kappa$ LUP and 81,100 M<sup>-1</sup> cm<sup>-1</sup> for IgL $\lambda$ LUP.<sup>7</sup> The probes were designed to have melting temperatures (T<sub>m</sub>) of 65-70°C, which is in between the annealing (T<sub>annealing</sub> = 55°C) and elongation (T<sub>elongation</sub> = 74°C) temperatures of the PCR:s.

Please delete the paragraph on page 13, line 29, to page 14, line 11, and replace it with the following paragraph:

PCR systems were designed for a 231 bp fragment of the human IgL $\kappa$  (GenBank accession number AK024974) and a 223bp fragment of the human IgL $\lambda$  (GenBank accession number X51755) comprising the IgL $\kappa$ LUP and IgL $\lambda$ LUP target sequences, respectively. Reaction conditions were optimized as described elsewhere (Kubista M, Stahlberg A, Bar T; Light-up probe based real-time Q-PCR. Proceedings of SPIE, in Genomics and Proteomics Technologies, Raghavachari R, Tan W,

Editors. Proceedings of SPIE 2001, 4264:53-58). IgL $\kappa$  and IgL $\lambda$  PCR:s both contained 75 mM Tris (pH 8.8), 20 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 0.1% Tween 20, 1 U of JumpStart™ Taq DNA polymerase (with antibody) (Sigma-Aldrich) and 200 ng/ $\mu$ L of BSA. Specific components for the IgL $\kappa$  PCR were 5mM MgCl<sub>2</sub>, 0.2mM deoxyribonucleotides (Sigma-Aldrich), 800nM of each primer (MedProbe) and 800nM IgL $\kappa$ LUP, and for the IgL $\lambda$  PCR 3.5 mM MgCl<sub>2</sub>, 0.4mM deoxyribonucleotides, 600nM of each primer and 600 nM IgL $\lambda$ LUP. Primer sequences were for IGL $\kappa$  5'-TGA GCA AAG CAG ACT ACG AGA-3' (forward) (~~SEQ. ID. NO. 1~~ **SEQ ID NO: 7**) and 5'-GGG GTG AGG TGA AAG ATG AG-3' (reverse) (~~SEQ. ID. NO. 2~~ **SEQ ID NO: 8**), and for IgL $\lambda$  5'-GAG CCT GAC GCC TGA G-3' (forward) (~~SEQ. ID. NO. 3~~ **SEQ ID NO: 9**) and 5'-ATT GAG GGT TTA TTG AGT GCA G-3' (reverse) (~~SEQ. ID. NO. 4~~ **SEQ ID NO: 10**).

Please delete the paragraph on page 20, lines 17-20, and replace it with the following paragraph:

Primers used in the BCR-ABL reaction were GCATTCCGCTGACCATCAATA (**SEQ ID NO: 11**) (b2a2-s), TCCAACGAGCGGCTTCAC (**SEQ ID NO: 12**) (b2a2-as) and CCACTGGATTAGCAGAGTTCAA (**SEQ ID NO: 13**) (b3a2-s). The sequence specific probe used was FAM-CAGCGGCCAGTAGCATCTGCTTTGA-BHQ1 (**SEQ ID NO: 14**).

Please delete the paragraph on page 20, lines 22-25, and replace it with the following paragraph:

Primers used in the GAPDH reaction CAACTGGGACGACTGGAGA (**SEQ ID NO: 15**) (GAPDH-s) and GAAGATGGTGATGGGATTTC (**SEQ ID NO: 16**) (GAPDH-as) and FAM-CAAGCTTCCCGTTCTCAGCC-DQ (**SEQ ID NO: 17**) or FAM-CAAGCTTCCCGTTCTCAGCC-BHQ1 (**SEQ ID NO: 18**) was used as sequence specific probe.

Please delete the paragraph on page 21, lines 16-20, and replace it with the following paragraph:

Primers used in the BCR-ABL reaction were GCATTCCGCTGACCATCAATA (SEQ ID NO: 11) (b2a2-s), TCCAACGAGCGGCTTCAC (SEQ ID NO: 12) (b2a2-as) and CCACTGGATTAGCAGAGTTCAA (SEQ ID NO: 13) (b3a2-s). Primers used in the GAPDH reaction were CAACTGGGACGACTGGAGA (SEQ ID NO: 15) (GAPDH-s) and GAAGATGGTGATGGGATTTC (SEQ ID NO: 16) (GAPDH-as).